

FIG.1

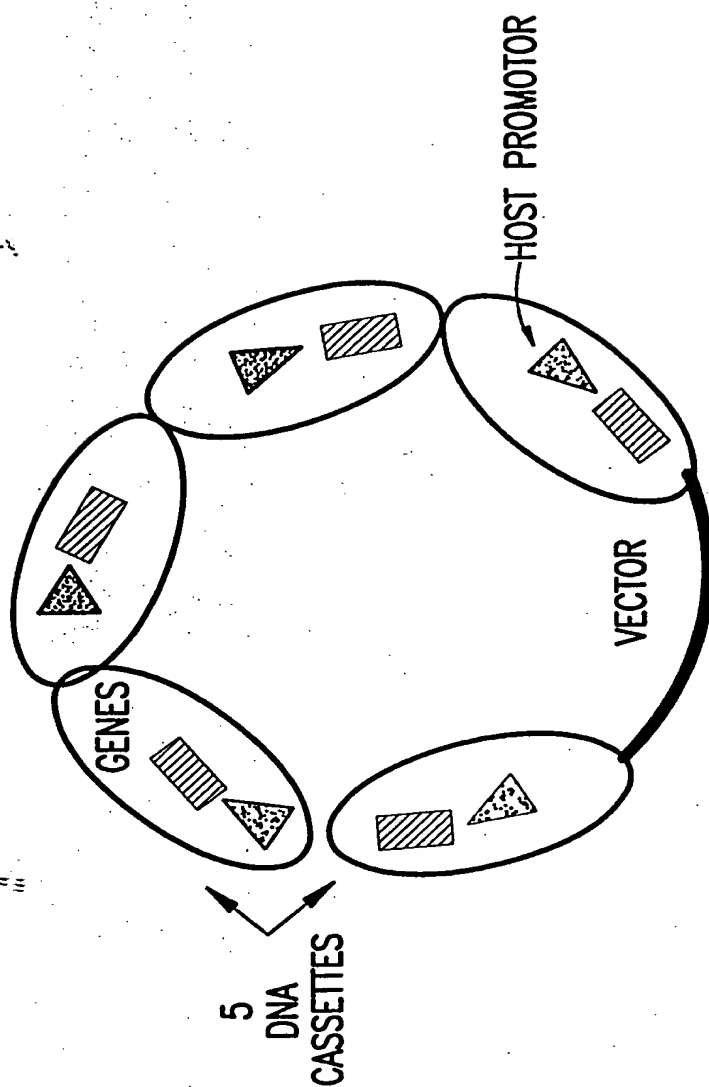


FIG.2

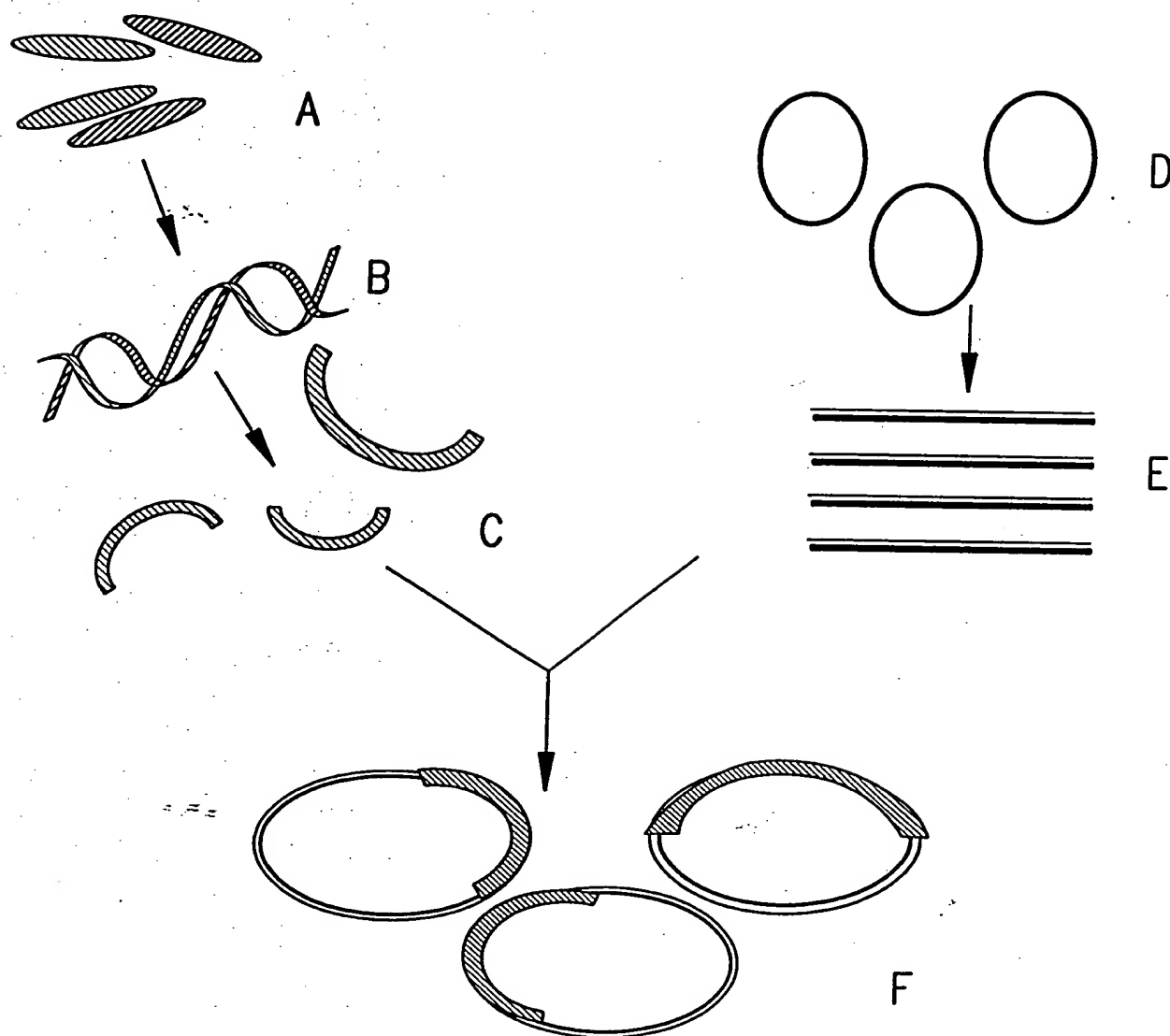


FIG.3

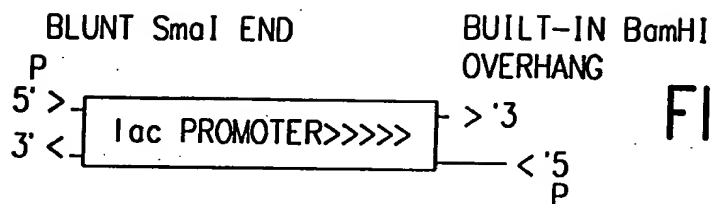


FIG.4A

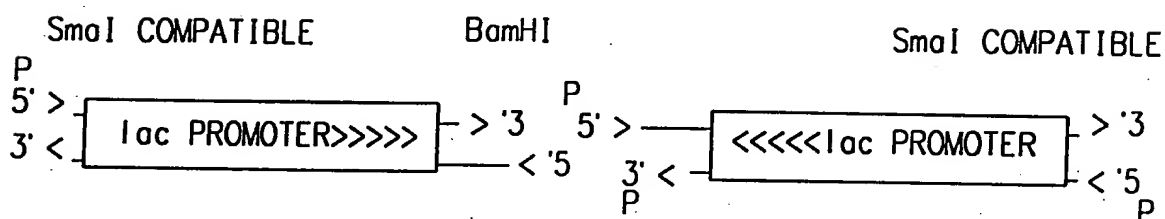


FIG.4B

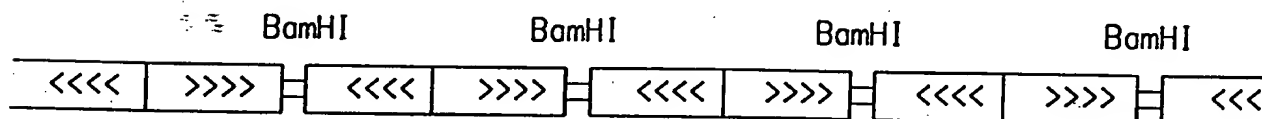
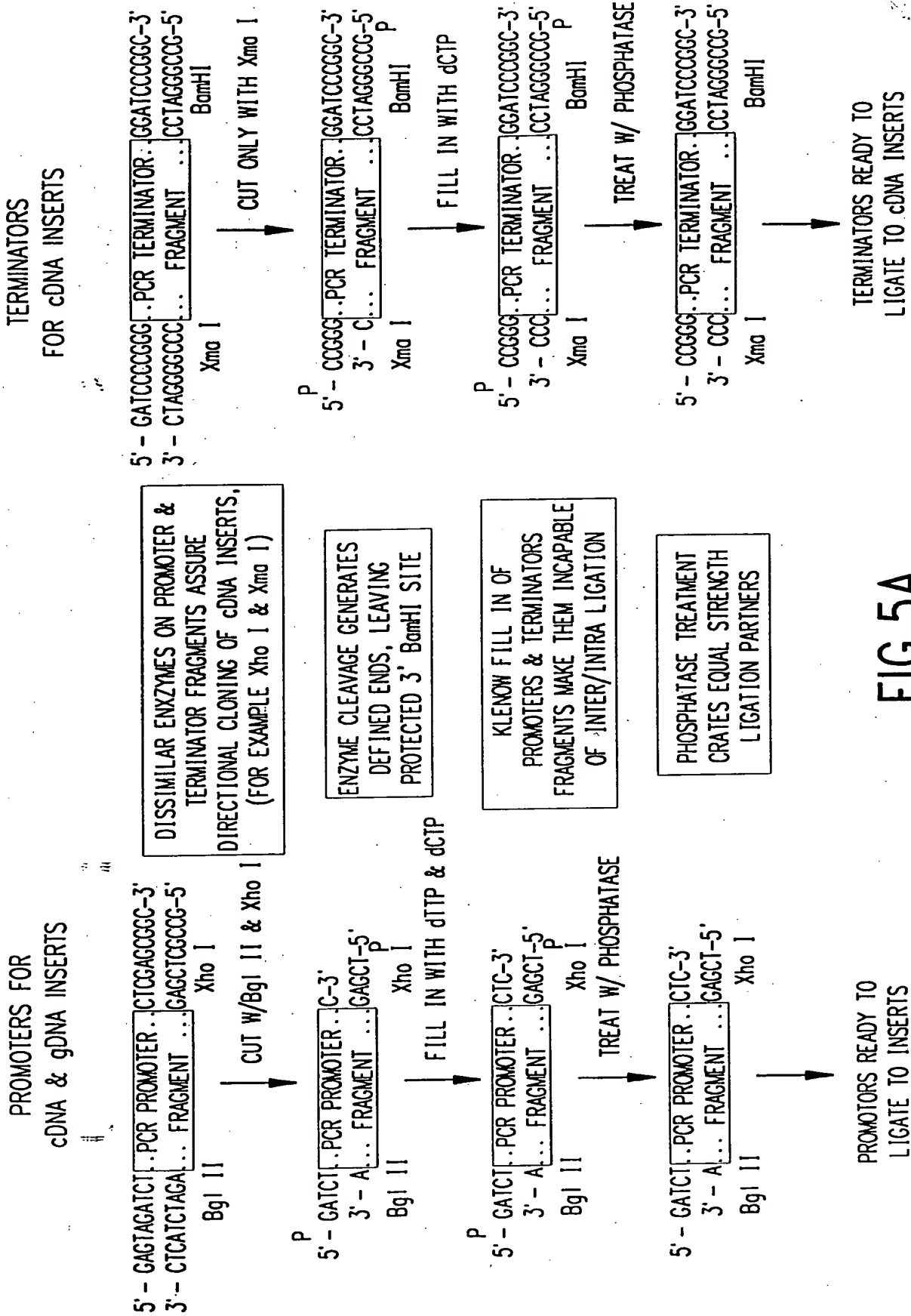


FIG.4C



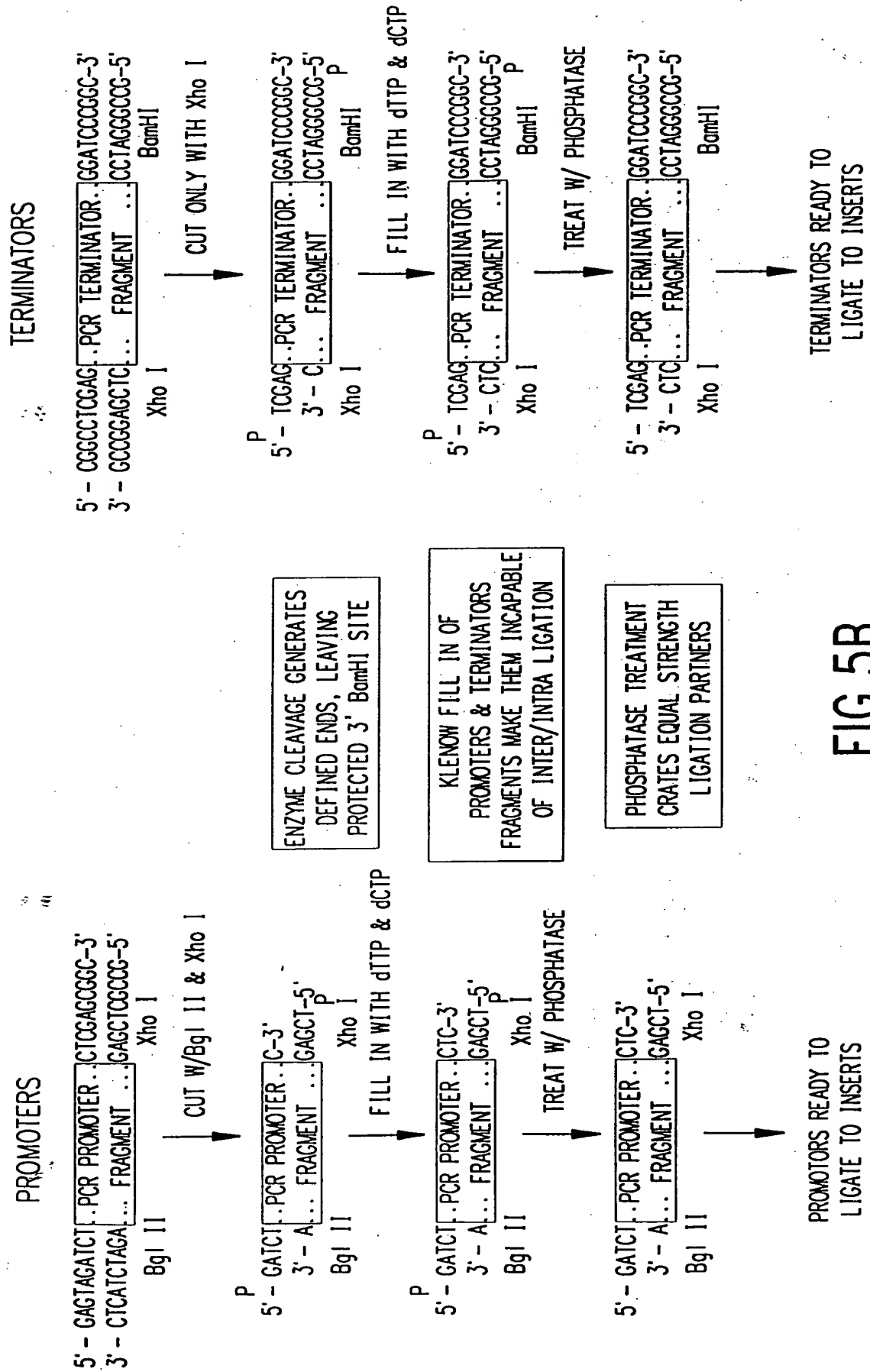
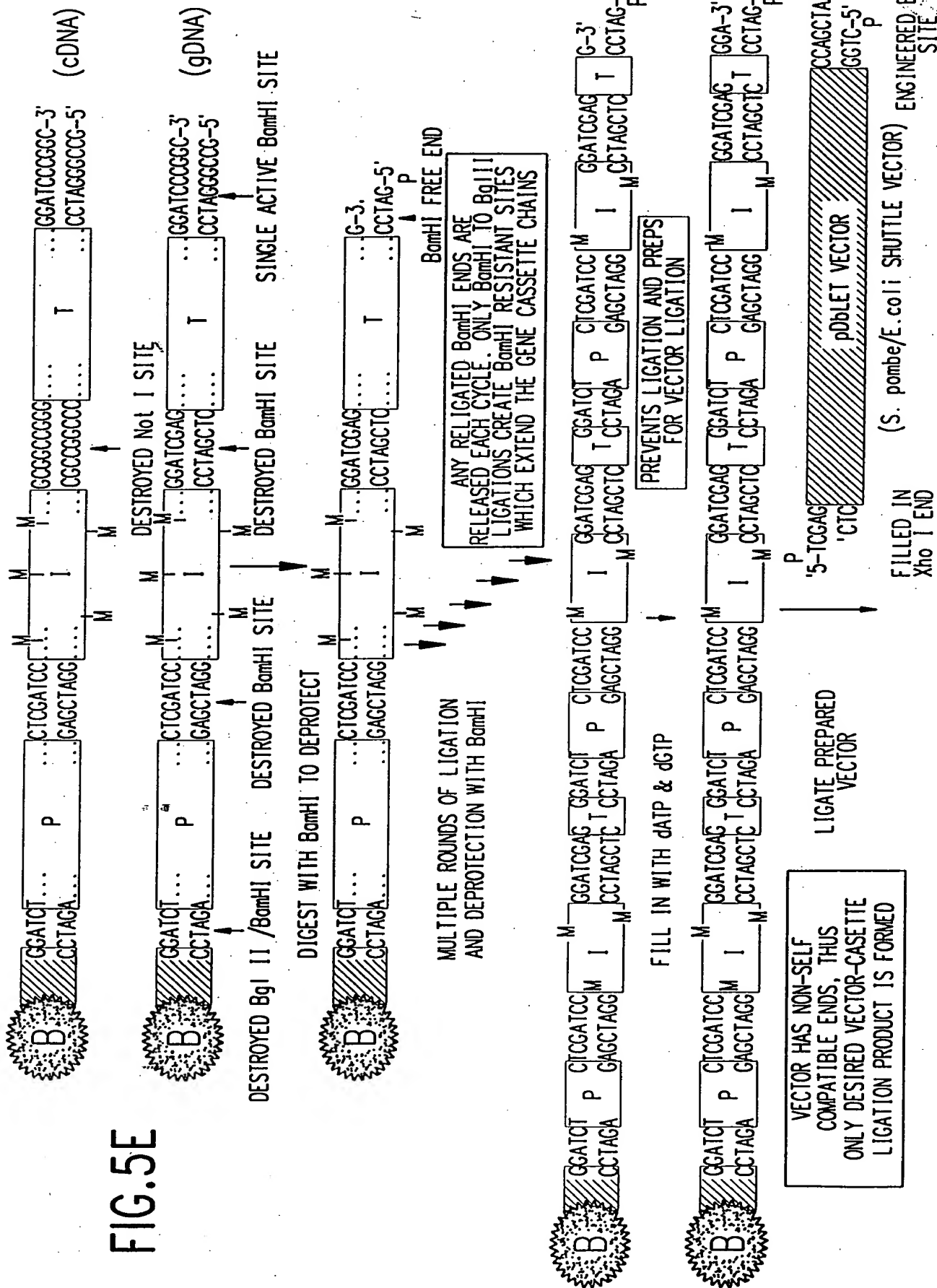


FIG.5B



FIG. 5E



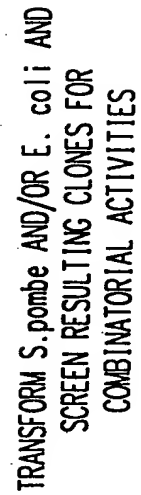


FIG. 5F

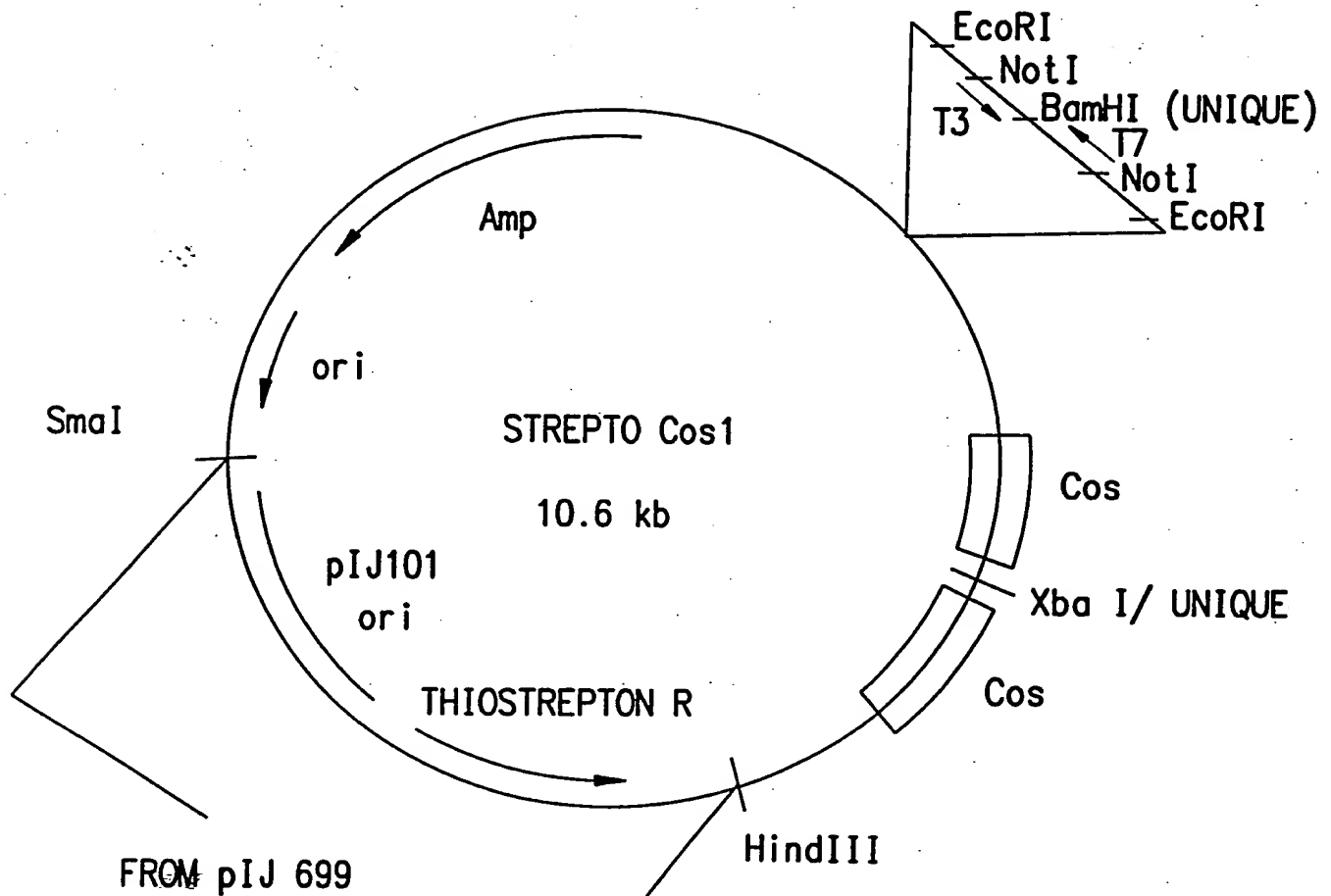
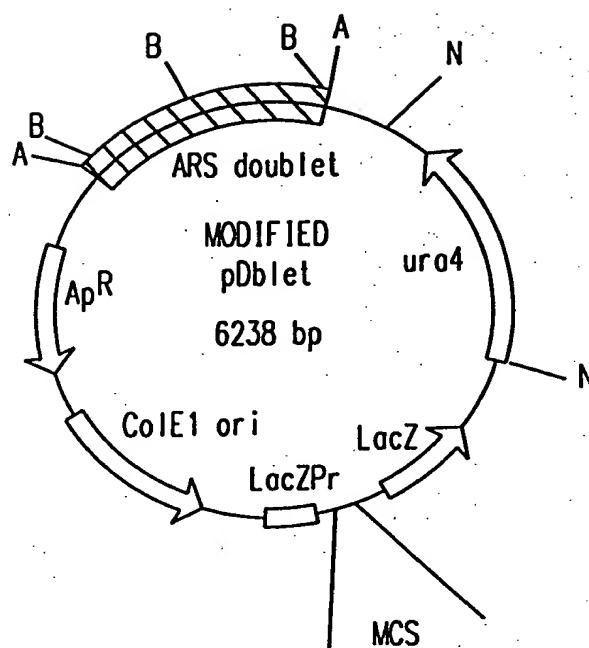


FIG.6A



MCS = SacI-NcoI-BstXI-NotI-Xba...

FIG.6B

5' CCTAGCCATGCCACCTAACTGGGATCGC 3'
 3' TCGAGGATCGGTACCGGTGGATTGACCCTAGCGCCGG 5'
 SacI NcoI BstXI NotI END

FIG.6C

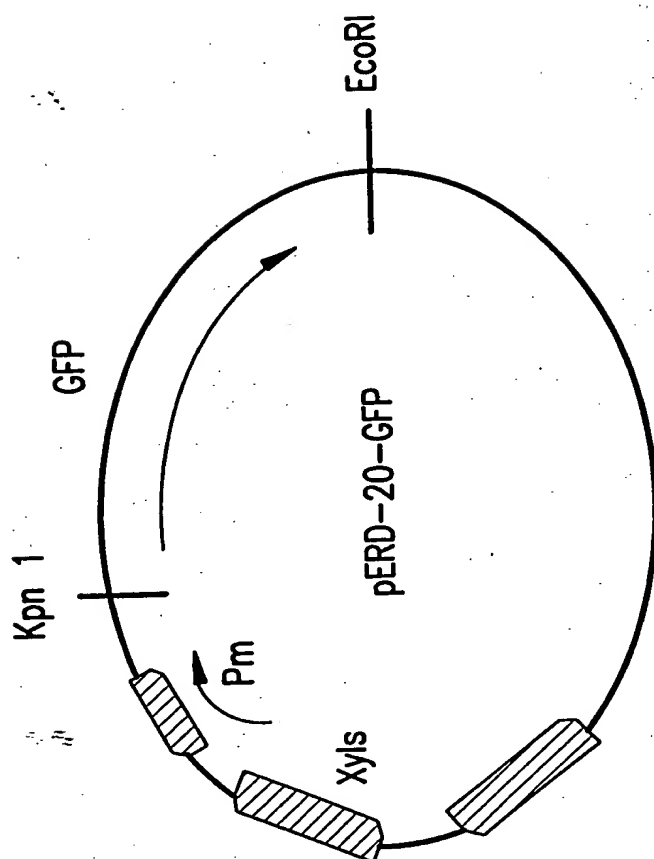


FIG.7

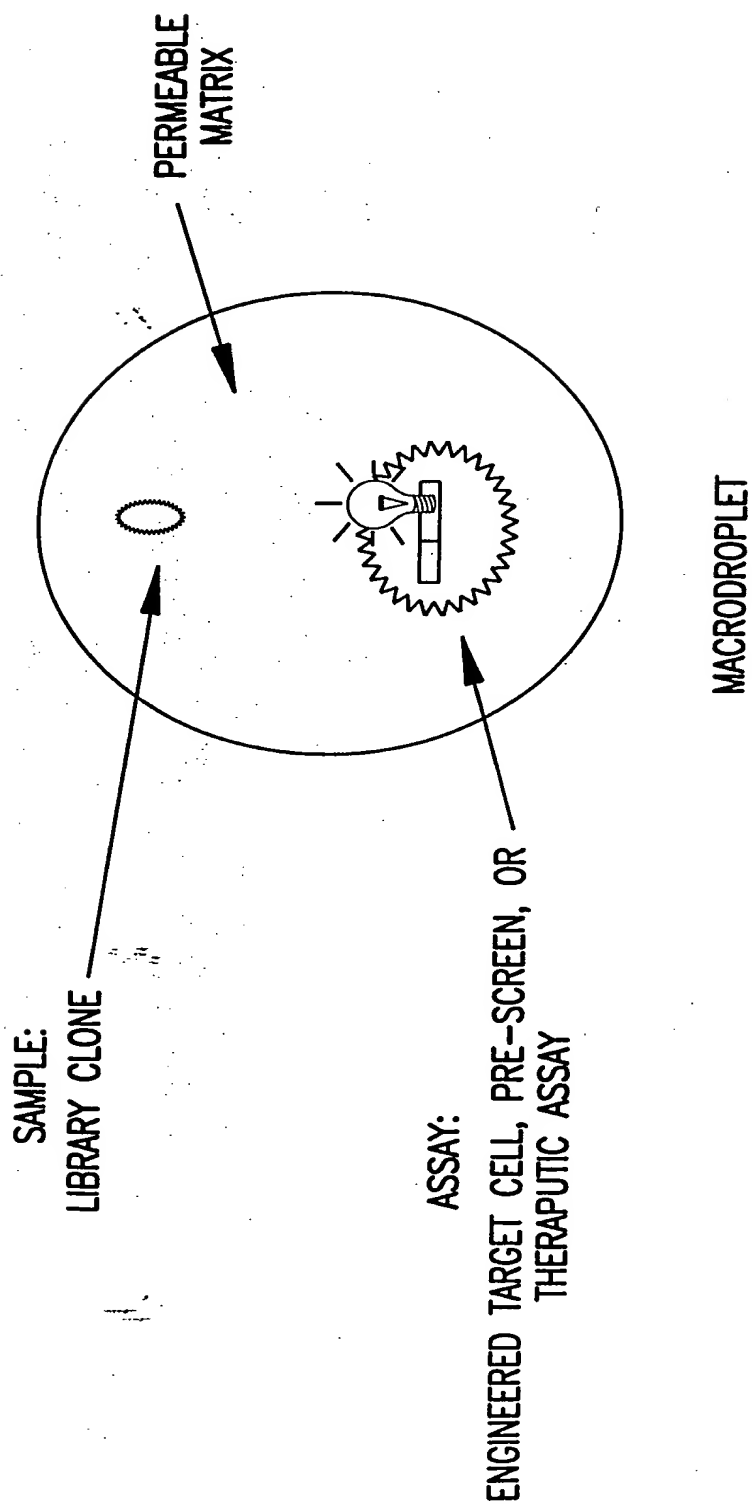


FIG.8

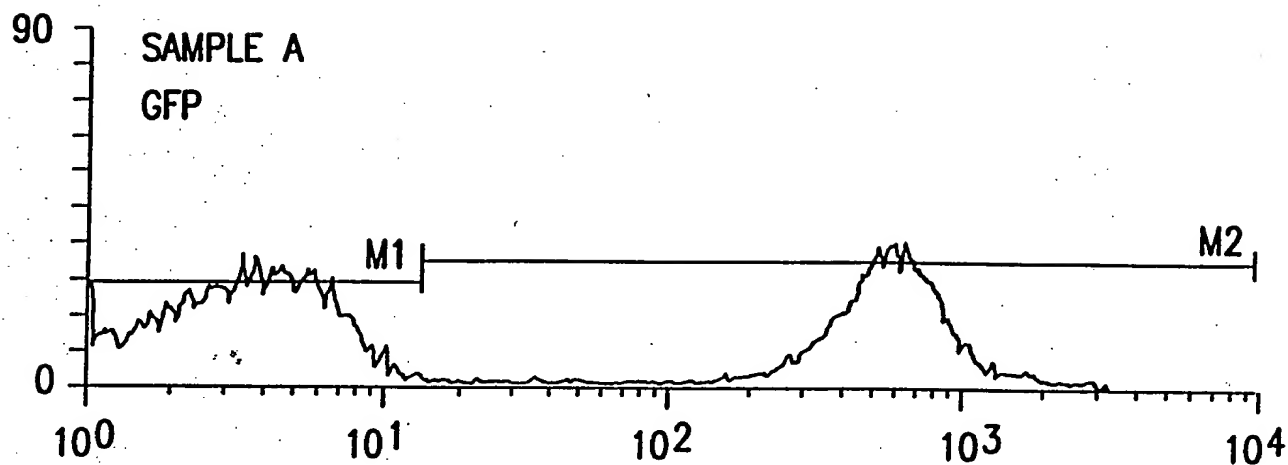


FIG.9A

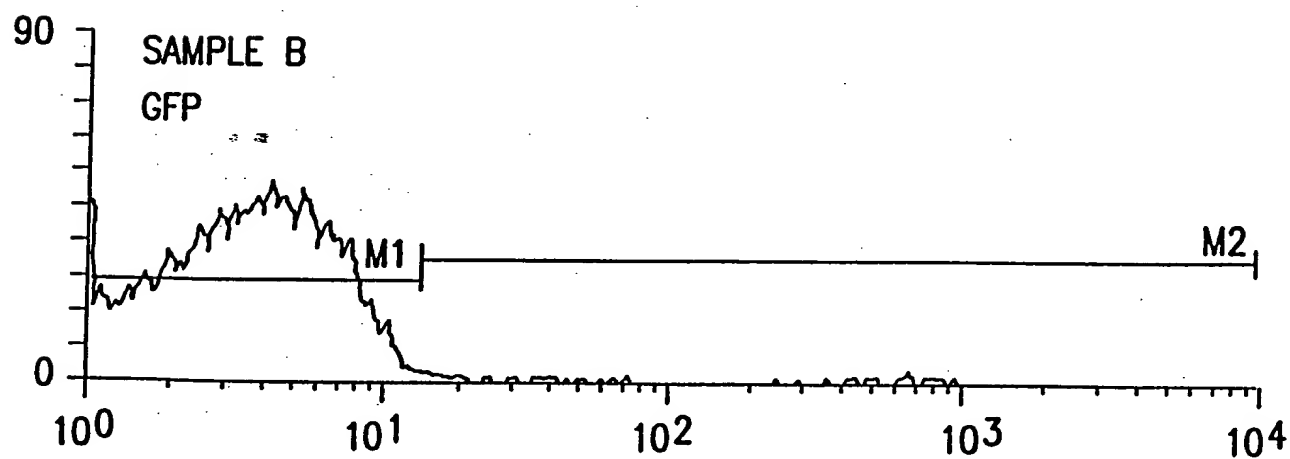


FIG.9B

POSITION			
CXC-AMN20	(1)	-----	
ACTINORHODIN DEHYDRASE	1	M T V E V R E V A E G V Y A Y E Q A P G G W C V S	N S H F I I T T Q G V L V F D S G S S E H I G N A (23)
			N A G I V V G G D G A L V V D T L S T I P R A R R 50
CXC-AMN20	(24)	T I A A V K R V T E Q P I R W V V N S H S H A D H W L G N A A L A K L G A E L I I S T S L S A E T M K (73)	
ACTINORHODIN DEHYDRASE	51	L A E W V D K L A A G P G R T V V N T T H F H G D H A F G N Q V F A P - G T R I I A H E D M R S A M V 99	
CXC-AMN20	(74)	S D G P V D V K A F F N M T K G A T G E S T L V I P T S I T L H Q Q T R T F G D T E V E F V F A N D (123)	
ACTINORHODIN DEHYDRASE	100	T T G L A L T G - L W P - - R V D W G E I E L R P P N V T F R D R L T L H V G E R Q V E L T C V G P 146	
CXC-AMN20	(124)	G H S P G D V M L W L P K Q R I T L I G C D V V N S N F M P I M T P R G N I T Q L I S V L K E V E Q L (173)	
ACTINORHODIN DEHYDRASE	147	A H T D H D V V V W L P E E R V L F A G D V V M S G V T P - F A L F G S V A G T L A A L D R L A E L 195	
CXC-AMN20	(174)	S P L L V L T G H G E N T S V K S V S R D I Q F L T Y A S N A V H E A L V K G T T P A K I Q A S L Q (223)	
ACTINORHODIN DEHYDRASE	196	E P E V V V G G H G P V A G P E V I I D A N R D Y L R W V Q R L A A D A V D R L T P L Q A A R R A D 245	
CXC-AMN20	(224)	A T L R T K F G K A Y Q D F D T S I S Y L L E M M I D K Q R L Q F S P T I - - - - - (264)	
ACTINORHODIN DEHYDRASE	246	L G A F A G L L D A E R L V A N L H R A H E E L L G G H V R D A M E I F A E L V A Y N G G Q L P T C 295	
CXC-AMN20	-	- - -	-
ACTINORHODIN DEHYDRASE	296	L A *	297

FIG.10

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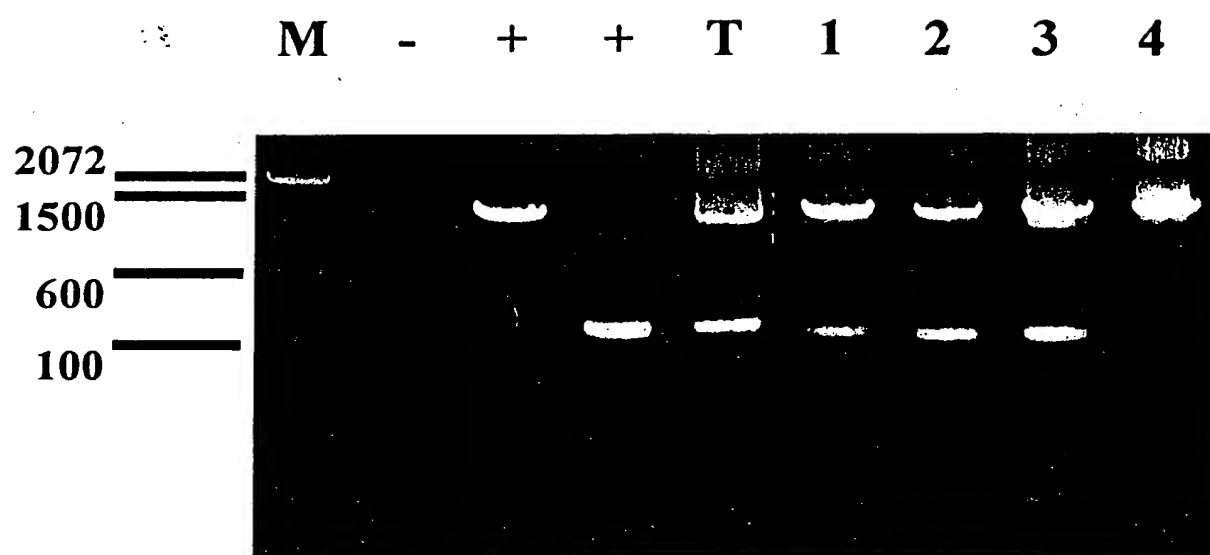


FIG.11

POOL 1

M - + + 1 2 3 4 5 6 7 8 9 10

2072
1500
600
100

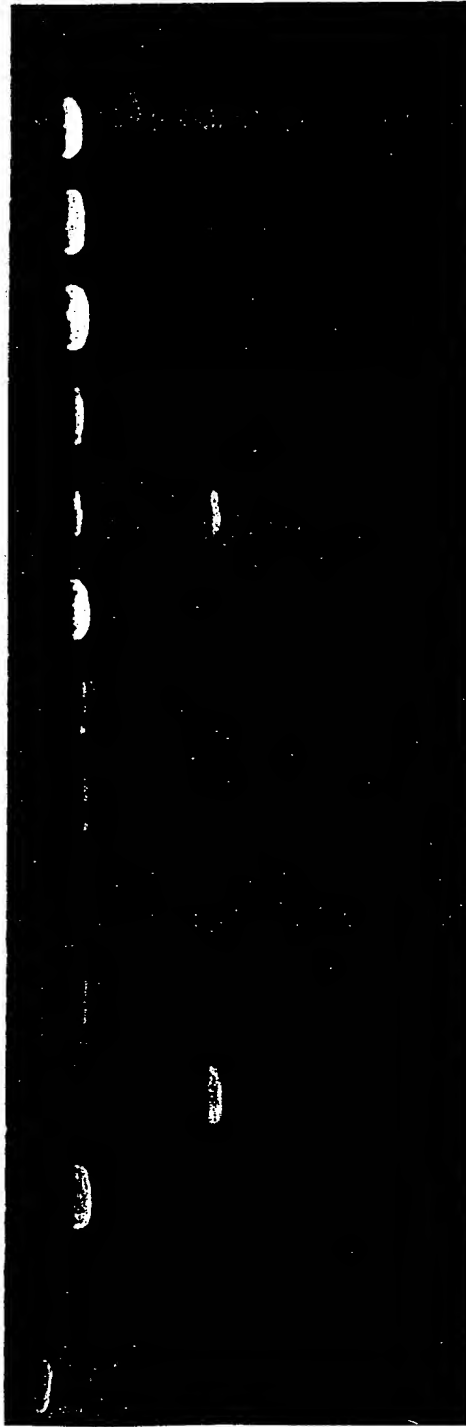


FIG.12A

POOL 2

M - + + 12 13 14 15 16 17 18 19 20

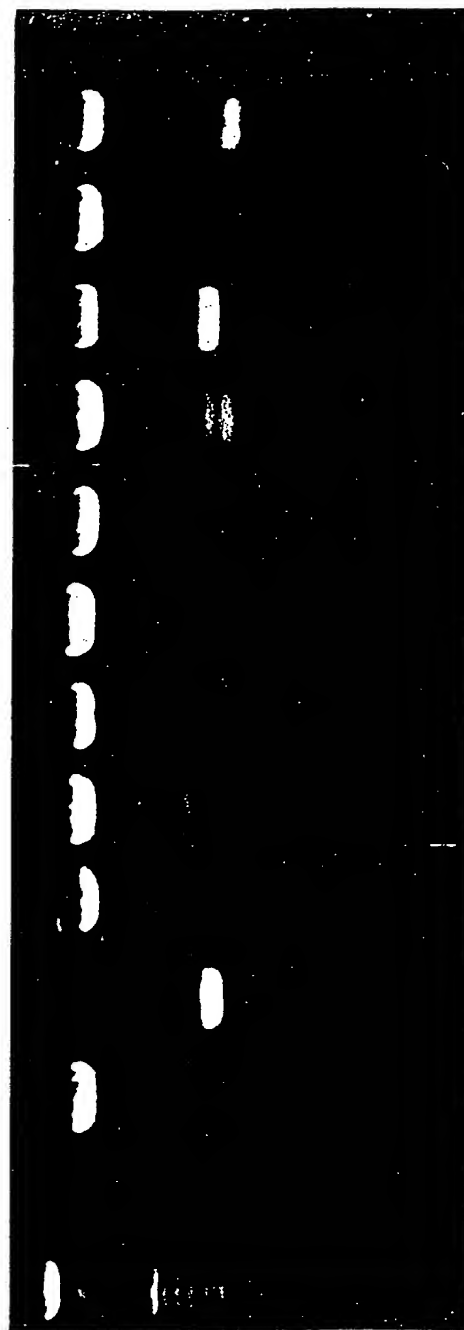


FIG. 12B

POOL 3

M - + + 21 22 23 27 30 31 32 33 34 35

2072
1500
600
100

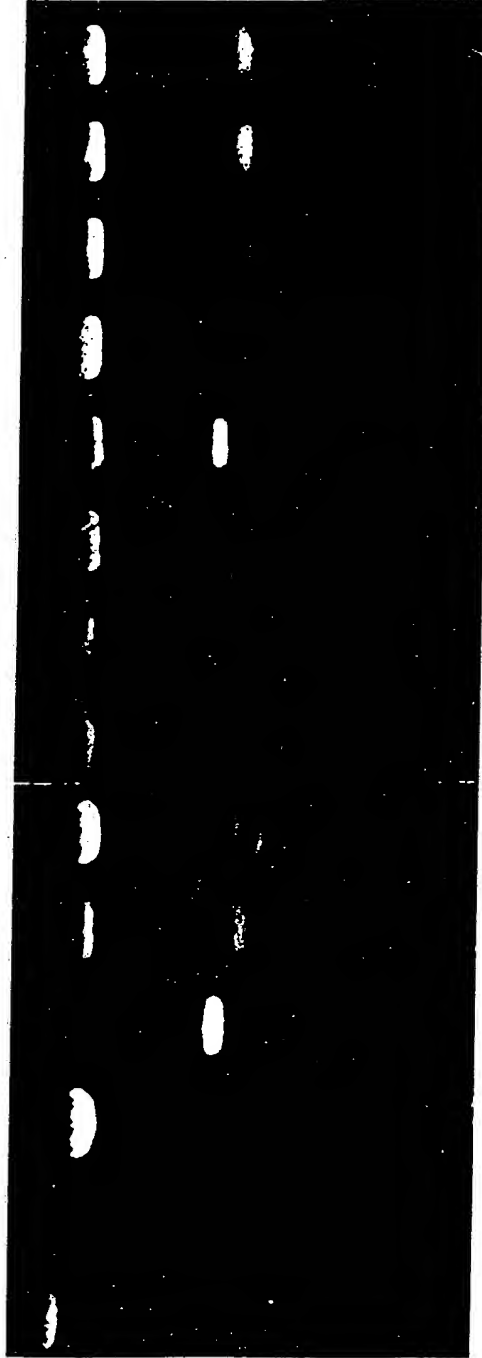


FIG.12C

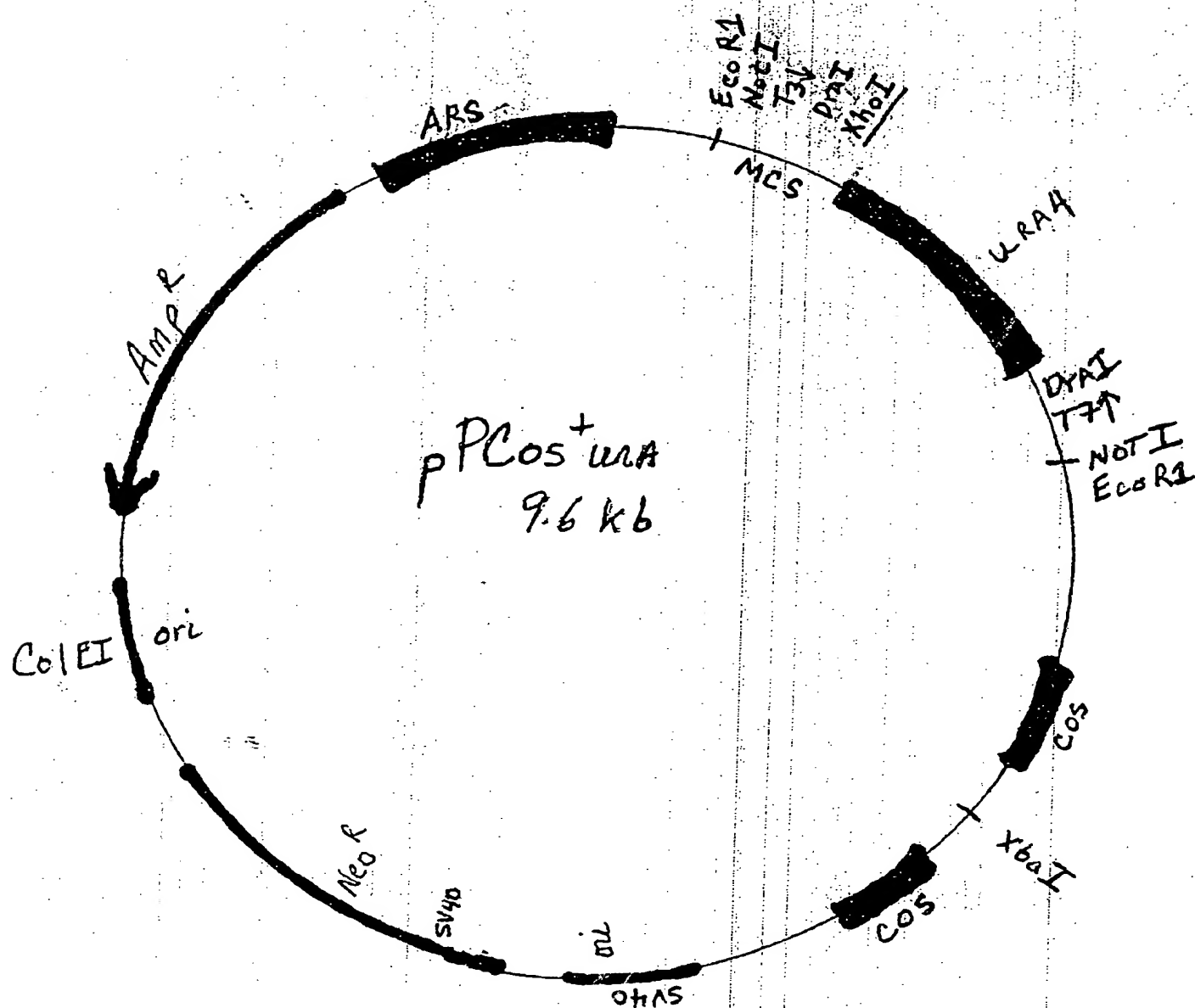


FIG. 13

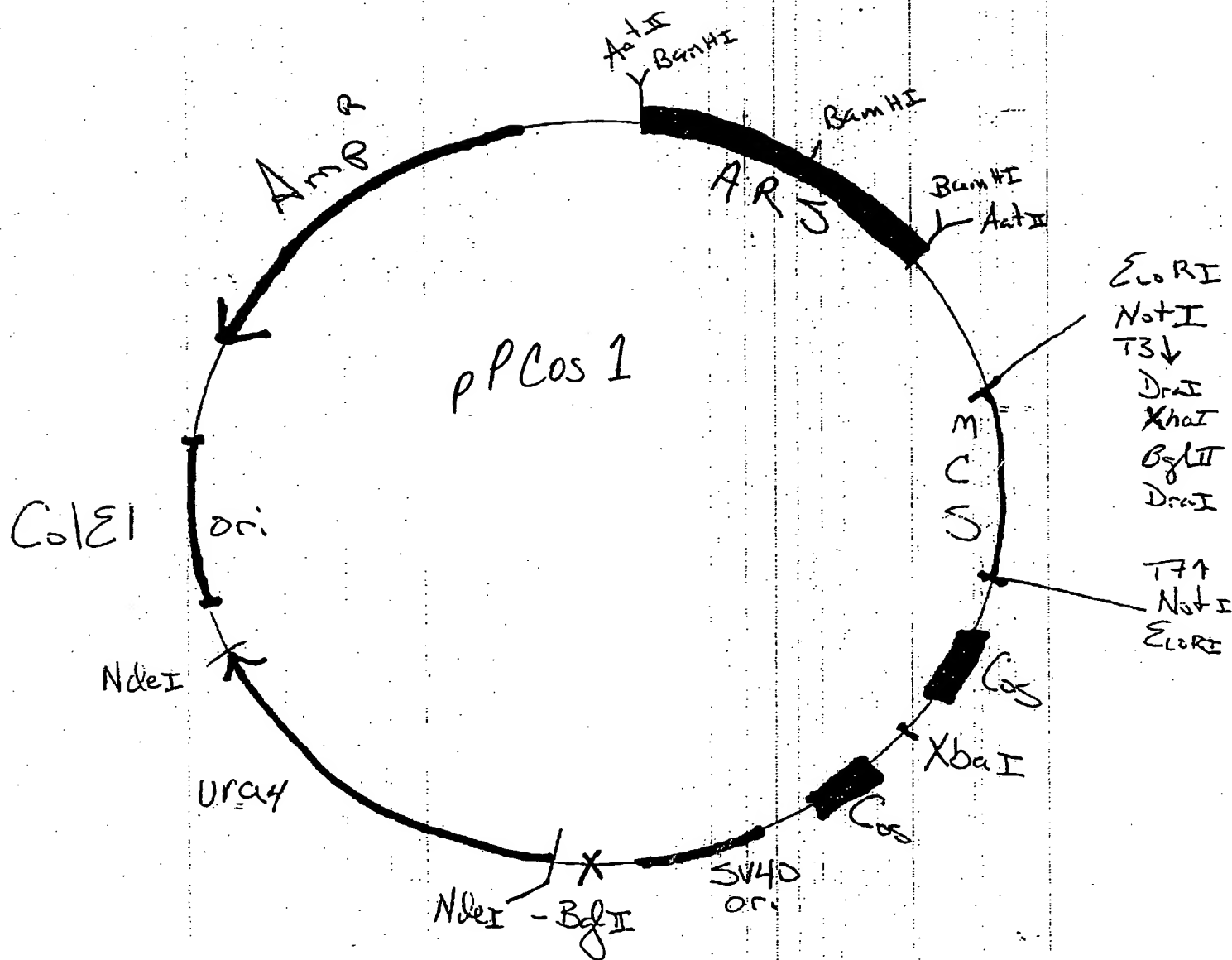


FIG. 14